

Weekly report (2013.10.8 ~10.13)

Done

- 1) Reformat my HPC paper into 8 pages and submit.

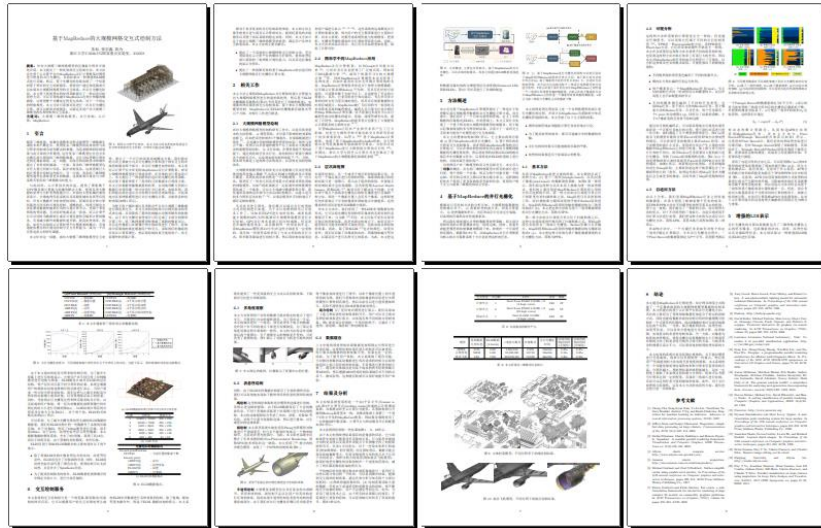


Figure 1 HPC paper overview

- 2) Fix the bug in VisNgin that when rotating the earth, it'll scale unexpectedly. However, the camera cannot meet all our needs, I'll transfer the camera in WorldWind to VisNgin if needed.

For the parallel part, coding has not yet begun. This week, Tianye continue reading the code. We plan to extract the earth-rendering part out of VisNgin first, to make sure we fully understand the corresponding code. Then start a parallel one.

- 3) After discuss with Prof. Zhang based on *"SketchStory Telling More Engaging Stories"*, we wonder if there can be a similar work in the area of scientific visualization. So I tried to find some relevant papers. The most relevant one I found is *"FI3D: Direct-Touch Interaction for the Exploration of 3D Scientific Visualization Spaces"*.

It presents a technique that provides touch interaction with 3D scientific data spaces in 7 DOF. And it can be done within single-point touch.

It's a basic work for sketching scientific visualization, and the user study shows that it hardly outperforms the traditional mouse interaction.

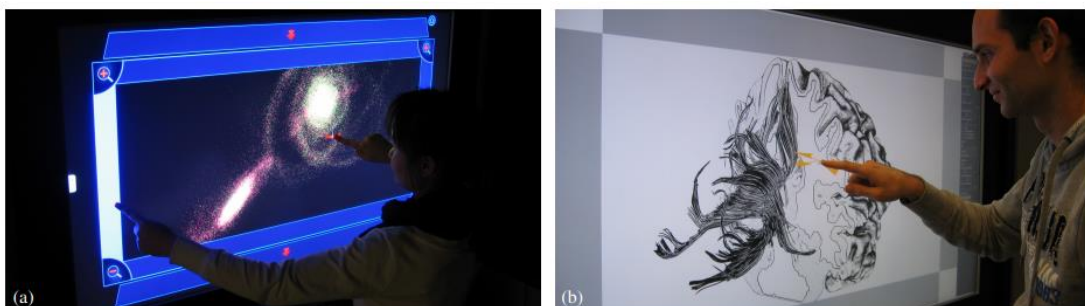


Fig. 1. Two case studies for a 3D visualization exploration widget that allows users to control the view in 7 degrees of freedom (DOF): (a) touch interaction with an astronomical simulation; (b) exploration of an illustrative 3D medical visualization.

- 4) This week, I start preparing for TOEFL at Nov. 9th. I'm not so confident of getting 95, so I may spend several hours every day.

- 5) Some conference-related chores.

To Do

- 1) Prepare for TOEFL.
- 2) Continue implementing the demo of rendering a textured earth with Equalizer.